ATENT COOPERATION TRE, . TY

	From the INTERNATIONAL BUREAU
PCT	To:
NOTIFICATION OF ELECTION (PCT Rule 61.2)	Assistant Commissioner for Patents United States Patent and Trademark Office Box PCT Washington, D.C.20231 ÉTATS-UNIS D'AMÉRIQUE
Date of mailing (day/month/year) 11 November 1999 (11.11.99)	in its capacity as elected Office
International application No. PCT/CA99/00293	Applicant's or agent's file reference O8-869947WO
International filing date (day/month/year) 13 April 1999 (13.04.99)	Priority date (day/month/year) 13 April 1998 (13.04.98)
Applicant MIKI, Brian et al	
1. The designated Office is hereby notified of its election made. X in the demand filed with the International Preliminary 24 Septembe	ry Examining Authority on: r 1999 (24.09.99) rnational Bureau on:
34, chemin des Colombettes 1211 Geneva 20, Switzerland	S. Mafla
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

HATENT COOPERATION TREATY

	From the INTERNATIONAL BUREAU
PCT	To:
NOTIFICATION OF THE RECORDING	2-2111-51212
OF A CHANGE	SECHLEY, Konrad, A.
	Gowling Lafleur Henderson LLP Suite 2600
(PCT Rule 92bis.1 and	160 Elgin Street
Administrative Instructions, Section 422)	Ottawa, Ontario K1P 1C3
Date of mailing (day/month/year)	CANADA
21 August 2000 (21.08.00)	
Applicant's or agent's file reference	IMPORTANT NOTIFICATION
O8-869947WO	IIVIFORTANT NOTHINGTION
International application No.	International filing date (day/month/year)
PCT/CA99/00293	13 April 1999 (13.04.99)
1. The following indications appeared on record concerning:	
the applicant the inventor	X the agent the common representative
Name and Address	State of Nationality State of Residence
SECHLEY, Konrad, A.	
Gowling, Strathy & Henderson Suite 2600	Telephone No.
160 Elgin Street	613 233 1781
Ottawa, Ontario K1P 1C3 Canada	Facsimile No.
Canada	613 563 9869
	Teleprinter No.
2. The International Bureau hereby notifies the applicant that the	ne following change has been recorded concerning:
the person the name X the add	
	State of Nationality State of Residence
Name and Address	State of Nationality State of nesidence
SECHLEY, Konrad, A. Gowling Lafleur Henderson LLP	Telephone No.
Suite 2600 160 Elgin Street	613 233 1781
Ottawa, Ontario K1P 1C3	Facsimile No.
Canada	613 563 9869
	Teleprinter No.
	releptinter No.
3. Further observations, if necessary:	
	•
A Agent of this natification has been cent to:	
4. A copy of this notification has been sent to:	
X the receiving Office	the designated Offices concerned
the International Searching Authority	X the elected Offices concerned
X the International Preliminary Examining Authority	other:
The International Bureau of WIPO	Authorized officer
34, chemin des Colombettes	A. Karkachi
1211 Geneva 20, Switzerland	Telephone No. (41 20) 220 02 20

Form PCT/IB/306 (March 1994)

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PATENT COOPERATION TREATY

PCT

09/673333

INTERNATIONAL SEARCH REPORT

(PCT Articl 18 and Rules 43 and 44)

Applicant's or agent's file reference 08-869947W0		of Transmittal of International Search Report 220) as well as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/CA 99/00293	13/04/1999	13/04/1998
Applicant HER MAJESTY IN RIGHT OF C.	ANADA as represented by T	
according to Article 18. A copy is being to	of a total of sheets.	
It is also accompanied by	a copy of each prior art document cited in this	з героп.
	international search was carried out on the ba less otherwise indicated under this item.	sis of the international application in the
the international search w Authority (Rule 23.1(b)).	vas carried out on the basis of a translation of	the international application furnished to this
was carried out on the basis of th Contained in the internation	nd/or amino acid sequence disclosed in the in e sequence listing: onal application in written form. ernational application in computer readable for	nternational application, the international search m.
furnished subsequently to	this Authority in written form.	
X furnished subsequently to	this Authority in computer readble form.	
	bsequently furnished written sequence listing o as filed has been furnished.	does not go beyond the disclosure in the
X the statement that the infeference furnished	ormation recorded in computer readable form	is identical to the written sequence listing has been
——————————————————————————————————————	ind unsearchable (See Box I).	
3. X Unity of invention is lac	king (see Box II).	•
4. With regard to the title,		
the text is approved as su	ibmitted by the applicant.	
the text has been establis	shed by this Authority to read as follows:	
5. With regard to the abstract, X the text is approved as sue the text has been establis within one month from the	ubmitted by the applicant. shed, according to Rule 38.2(b), by this Author e date of mailing of this international search re	ity as it appears in Box III. The applicant may, port, submit comments to this Authority.
6. The figure of the drawings to be public	ished with the abstract is Figure No.	<u>-</u>
as suggested by the appl	icant.	None of the figures.
because the applicant fail	•	
because this figure better	characterizes the invention.	

International application No. PCT/CA 99/00293

INTERNATIONAL SEARCH REPORT

B x I Obs rvations where c rtain claims w r f und unsearchable (Continuati n f item 1 f first sheet)	
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:	
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:	
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:	
Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).	
B x II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)	
This International Searching Authority found multiple inventions in this international application, as follows:	
see additional sheet	
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.	
2. X As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.	
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:	
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:	
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.	

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 10,20,31 and 32 all completely, and 1,2,5,11,12,15, 21-30,37-40

Genomic DNA sequences differentially or preferentially expressed in seed coat tissues, seed coat promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors as represented in SEQ ID NO:7

2. Claims: 33 and 34 both completely, and 1,2,4,5,11,12,14,15, 16,18,21-30,37-40

Genomic DNA sequences differentially or preferentially expressed in seed coat tissues, seed coat promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors as represented in SEO ID NO:8

3. Claims: 9,35 and 36 all completely, and 1,2,3,11.12,13, 21-30,37-40 all partially

Genomic DNA sequences differentially or preferentially expressed in seed coat tissues, seed coat promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors as represented in SEQ ID NO:9

4. Claims: 1,2,4,5,11,12,14,15,21-30 all partially

Genomic DNA sequences differentially or preferentially expressed in seed coat tissues, seed coat promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors as represented by sequences derived from SEQ ID NO:5

5. Claims: 6 and 16 both completely, and 1,11, 22-30 all partially

Genomic DNA sequences differentially or preferentially expressed in endothelium cells of the seed coat, endothelium promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

6. Claims: 7 and 17 both completely, and 1,2,5,11,12,15, 22-30 all partially

Genomic DNA sequences differentially or preferentially expressed in hourglass and outer integument cells of the seed coat, hourglass/outer integument promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors, as represented by SEQ ID NO:2.

7. Claims: 8 and 18 both completely, and 1,11, 22-30 all partially

Genomic DNA sequences differentially or preferentially expressed in palisade cells of the seed coat, palisade promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors.

8. Claims: 1,11,22,23,24-30 all partially

Genomic DNA sequences differentially or preferentially expressed in the tobacco seed coat, tobacco seed coat promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors as represented by SEQ ID NO:1

International Application No PCT/CA 99/00293

CLASSIFICATION OF SUBJECT MATTER PC 6 C12N15/29 C12I A01H5/00 IPC 6 C12N15/82 C12N5/10 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) C12N A01H IPC 6 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages CA 2 186 833 A (MINI OF AGRICULTURE AND 1 - 30Х AGRI F) 31 March 1998 (1998-03-31) the whole document CA 2 211 018 A (CANADA MAJESTY IN RIGHT 1-30 X OF) 30 March 1998 (1998-03-30) the whole document WO 97 15656 A (INDIANA CROP IMPROVEMENT 1 - 30X ASS) 1 May 1997 (1997-05-01) the whole document CA 2 149 000 A (FOBERT PIERRE : MIKI BRIAN 1-30 Χ (CA); IYER VENKATRAN N (CA)) 10 November 1996 (1996-11-10) the whole document -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. Χ Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date onsidered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docucitation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report **U** 9. 11. 99 14 October 1999 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, MADDOX, A Fax: (+31-70) 340-3016

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International Application No
PCT/CA 99/00293

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
		
X .	FOBERT P R ET AL: "T-DNA TAGGING OF A SEED COAT-SPECIFIC CRYPTIC PROMOTER IN TOBACCO" PLANT JOURNAL, vol. 6, no. 4, 1 January 1994 (1994-01-01), pages 567-577, XP002030412 ISSN: 0960-7412 the whole document	1-30
x	WO 91 09957 A (DU PONT) 11 July 1991 (1991-07-11) page 83 -page 84	1-23, 25-30
x	COLOMBO, L., ET AL.: "Downregulation of ovule-specific MADS box genes from petunia results in maternally controlled defects in seed development" THE PLANT CELL, vol. 9, no. 5, 1997, pages 703-715, XP002118567 the whole document	1-23, 25-30
A	ODANI, S., ET AL.: "Soybean hydrophobic protein. Isolation, partial characterization and the complete primary structure" EUROPEAN JOURNAL OF BIOCHEMISTRY, vol. 162, no. 3, 1987, pages 485-491, XP002118845 cited in the application the whole document	10,32,33
A	SABALA, I.: "Norway spruce mRNA for antifreeze-like protein (af70), comploet cds." EMBL ACCESSION NO:D86598, 10 August 1996 (1996-08-10), XP002118846 the whole document	1-40
A	RHODES, P.R., ET AL.: "Soybean seed lectin gene transposable element tgm1" EMBL ACCESSION NO:K02837, 2 July 1996 (1996-07-02), XP002118847 the whole document	1-40

Information on patent family members

International Application No PCT/CA 99/00293

Patent do		Publication date		atent family nember(s)	Publication date
CA 2186	833 A	31-03-1998	CA	2211018 A	30-03-1998
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WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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A3

(11) International Publication Number:

WO 99/53067

(43) International Publication Date:

21 October 1999 (21.10.99)

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(22) International Filing Date:

13 April 1999 (13.04.99)

(30) Priority Data:

09/059,090

13 April 1998 (13.04.98)

US

(63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application

US Filed on 09/059,090 (CIP) 13 April 1998 (13.04.98)

(71) Applicant (for all designated States except US): HER MAJESTY IN RIGHT OF CANADA as represented by THE MINISTER OF AGRICULTURE AND AGRI-FOOD CANADA [CA/CA]; Eastern Cereal & Oilseed Research Centre, K.W. Neatby Building, Ottawa, Ontario K1A OC6 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): MIKI, Brian [CA/CA]; 1876 Dorset Drive, Ottawa, Ontario K1H 5V1 (CA). GI-JZEN, Mark [CA/CA]; 848 Princess Avenue, London, Ontario N5W 3M4 (CA). MILLER, Shea [CA/CA]; 69 Kenilworth Street, Ottawa, Ontario K1Y 3Y5 (CA). BOW- MAN, Lu-Ann [CA/CA]; R.R. #3, Listowel, Ontario N4W 3G8 (CA). BATCHELOR, Anthea [GB/CA]; 45 Alexander Street, Ottawa, Ontario K1M 1N1 (CA). HU, Ming [CA/CA]; 279 Kundson Drive, Kanata, Ontario K2K 2N8 (CA). BOUTILIER, Kim [CA/NL]; Groen van Prinsterstraat 87, NL-6702 CP Wageningen (NL).

- (74) Agents: SECHLEY, Konrad, A. et al.; Gowling, Strathy & Henderson, Suite 2600, 160 Elgin Street, Ottawa, Ontario K1P 1C3 (CA).
- (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With a revised version of the international search report.

- (88) Date of publication of the international search report:
 9 December 1999 (09.12.99)
- (88) Date of publication of the revised version of the international search report: 20 January 2000 (20.01.00)

(54) Title: SEED-COAT PROMOTERS, GENES AND GENE PRODUCTS

(57) Abstract

The present invention is directed to isolated genomic sequences that are differentially expressed within seed—coat tissues. These DNAs are expressed within the inner integument, thick, or thin, walled parenchyma, endothelium, palisade, hourglass, or stellate parenchyma cells of the seed—coat. Furthermore, this invention relates to promoter regions obtained from genomic sequences that are differentially expressed in seed—coat tissues, and their use for directing seed—coat specific expression of genes of interest within transformed plant cells or plants. Exemplified promoters include those obtained from the differential screening of a seed—coat library and cryptic promoters obtained using T-DNA tagging using a promoterless marker gene.

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Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

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REVISED VERSION

	INT	ERNATIONAL	SEARCH	REPORT	Interronal A	•
A. CLASS	SIFICATION OF SUBJECT	MATTER			PCT/CA 9	99/00293
IPC 6	C12N15/29	C12N15/82	C12N5/10	0 A01H5/0	90	
According	to international Patent Clas	saffication (IPC) or to both				
	SEARCHED	Sincetable (IF C) or to both	national classifica	ation and IPC		
Minimum d	ocumentation searched (c	lassification system follow	ed by classification	on symbols)		
IPC 6	CIZN AUTH					
Document	tion searched other than m	iinimum documentation to	the extent that s	uch documents are inclu	uded in the fields a	searched
Electronio d	lata base consulted during	the international search (name of data bas	e and, where practical,	search terms use	d)
C. DOCUM	ENTS CONSIDERED TO E					·
Category °	Citation of document, wit	h indication, where appro	priate, of the rele	vant passages		Relevant to claim No.
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X	CA 2 186 83 AGRI F) 31 the whole d	3 A (MINI OF March 1998 (1 locument	AGRICULTU 998-03-31	JRE AND .)		1-30
Х	CA 2 211 01 0F) 30 Marc the whole d	8 A (CANADA M h 1998 (1998-	AJESTY IN 03-30)	RIGHT		1-30
x	WO 97 15656	A (INDIANA C 1997 (1997-05	ROP IMPRO -01)	VEMENT		1-30
X	(CA); IYEK	O A (FOBERT P VENKATRAN N (0 1996 (1996-1) ocument	CAll	KI BRIAN		1-30
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X Furth	er documents are listed in t	he continuation of box C.		X Patent family m	embers are listed	i
Special cate	gories of cited documents	·				
	it defining the general state		יי	later document publis	shed after the inte	mational filing date
conside	red to be of particular relev	ance		or priority date and a cited to understand invention	the principle or the	eory underlying the
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Which is	t which may throw doubts of cited to establish the public	cation date of another	•~	cannot be considered involve an inventive	step when the do	cument is taken alone
O documer	or other special reason (as it referring to an oral disclo		·	document of particular cannot be considered	ed to involve an inv	entive sten when the
"P" documen	eans t published prior to the inte n the priority date claimed		••	document is combin ments, such combin in the art.	ation being obviou	s to a person skilled
	tual completion of the inter	national search		Onte of moiling of the		
14	October 1999			Date of mailing of the		rch report
Name and ma	iling address of the ISA			Authorized officer		
	NL - 2280 HV Rijswijk	P.B. 5818 Patentiaan 2				
	Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016			MADDOX,	Α	

Form PCT/ISA/210 (second sheet) (July 1992)

2

MADDOX, A

Inter onal Application No PCT/CA 99/00293

	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FOBERT P R ET AL: "T-DNA TAGGING OF A SEED COAT-SPECIFIC CRYPTIC PROMOTER IN TOBACCO" PLANT JOURNAL, vol. 6, no. 4, 1 January 1994 (1994-01-01), pages 567-577, XP002030412 ISSN: 0960-7412 the whole document	1-30
x	WO 91 09957 A (DU PONT) 11 July 1991 (1991-07-11) page 83 -page 84	1-23, 25-30
x	COLOMBO, L., ET AL.: "Downregulation of ovule-specific MADS box genes from petunia results in maternally controlled defects in seed development" THE PLANT CELL, vol. 9, no. 5, 1997, pages 703-715, XP002118567 the whole document	1-23, 25-30
A	ODANI, S., ET AL.: "Soybean hydrophobic protein. Isolation, partial characterization and the complete primary structure" EUROPEAN JOURNAL OF BIOCHEMISTRY, vol. 162, no. 3, 1987, pages 485-491, XP002118845 cited in the application the whole document	10,32,33
4	SABALA, I.: "Norway spruce mRNA for antifreeze-like protein (af70), comploet cds." EMBL ACCESSION NO:D86598, 10 August 1996 (1996-08-10), XP002118846 the whole document	1-40
	RHODES, P.R., ET AL.: "Soybean seed lectin gene transposable element tgm1" EMBL ACCESSION NO:K02837, 2 July 1996 (1996-07-02), XP002118847 the whole document	1-40

PCT/CA 99/00293

Box	Observations where certain claims w re found unsear hable (Continuation of item 1 of first sheet)
This Inte	ernational Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1.	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
	Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This Intern	rnational Searching Authority found multiple inventions in this international application, as follows:
	see additional sheet
1 <i>A</i>	As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. X A	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. A	As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. N	No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is estricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark or	The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

ý

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 10,20,31 and 32 all completely, and 1,2,5,11,12,15, 21-30,37-40

Genomic DNA sequences differentially or preferentially expressed in seed coat tissues, seed coat promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors as represented in SEQ ID NO:7

2. Claims: 33 and 34 both completely, and 1,2,4,5,11,12,14,15, 16,18,21-30,37-40

Genomic DNA sequences differentially or preferentially expressed in seed coat tissues, seed coat promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors as represented in SEQ ID NO:8

3. Claims: 9,35 and 36 all completely, and 1,2,3,11.12,13, 21-30,37-40 all partially

Genomic DNA sequences differentially or preferentially expressed in seed coat tissues, seed coat promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors as represented in SEQ ID NO:9

4. Claims: 1,2,4,5,11,12,14,15,21-30 all partially

Genomic DNA sequences differentially or preferentially expressed in seed coat tissues, seed coat promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors as represented by sequences derived from SEQ ID NO:5

5. Claims: 6 and 16 both completely, and 1,11, 22-30 all partially

Genomic DNA sequences differentially or preferentially expressed in endothelium cells of the seed coat, endothelium promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

 Claims: 7 and 17 both completely, and 1,2,5,11,12,15, 22-30 all partially

Genomic DNA sequences differentially or preferentially expressed in hourglass and outer integument cells of the seed coat, hourglass/outer integument promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors, as represented by SEQ ID NO:2.

7. Claims: 8 and 18 both completely, and 1,11, 22-30 all partially

Genomic DNA sequences differentially or preferentially expressed in palisade cells of the seed coat, palisade promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors.

8. Claims: 1,11,22,23,24-30 all partially

Genomic DNA sequences differentially or preferentially expressed in the tobacco seed coat, tobacco seed coat promoters, vectors containing said promoters, plant cells and transgenic plants transformed with said promoters and vectors as represented by SEQ ID NO:1

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Intermional Application No PCI/CA 99/00293

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Inter tional Application No
PC I / CA 99/00293

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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 08-869947W0		of Transmittal of International Search Report 220) as well as, where applicable, Item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
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according to Article 18. A copy is being tra This international Search Report consists	_	
A is a doc accompanied by	a copy or each prior ait document once in the	report
Basis of the report With regard to the language, the language in which it was filed, unit	international search was carried out on the bas less otherwise indicated under this item.	sis of the international application in the
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3. X Unity of invention is lack	ding (see Box II).	
4. With regard to the tittle, X the text is approved as suf the text has been establish	bmitted by the applicant. hed by this Authority to read as follows:	
5. With regard to the abstract,		
the text is approved as subth text has been establish within one month from the	brnitted by the applicant. hed, according to Rul 38.2(b), by this Authorit date of mailing of this international search rep	y as it appears in Box III. The applicant may, ort, submit comments to this Authority.
6. The figure of the drawings to be public		
as suggested by the applicant falls		Non of the figures.
because the applicant falle because this figure better of	ed to suggest a figure. characterizes the invention.	

International application No.

PCT/CA 99/00293

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)	
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:	
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:	
Claims Nos.: because they relate to parts of the international Application that do not comply with the prescribed requirements to such an extent that no meaningful international Search can be carried out, specifically:	
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).	
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)	
This international Searching Authority found multiple inventions in this international application, as follows:	
see additional sheets	
As all required additional search fees were timely paid by the applicant, this international Search Report covers all searchable claims.	
2. X As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.	
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:	
4. No required additional search fees were timely paid by the applicant. Consequently, this international Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:	
Remark n Protest The additional search fees were accompanied by th applicant's protest. No protest accompanied the payment of additional search fees.	

International Application No PCT/CA 99/00293

			
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Date of the	actual completion of the international search	Date of mailing of the international sea	arch report
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	Fac (+31-70) 340-3016	Maddox, A	

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